

MassDEP Air Monitoring Network

- Verify compliance with National Ambient Air Quality Standards
- Provide the public with air quality information
- Support development of control strategies and assess their effectiveness
- Inform facility-specific permitting
- Support air pollution modeling and research studies

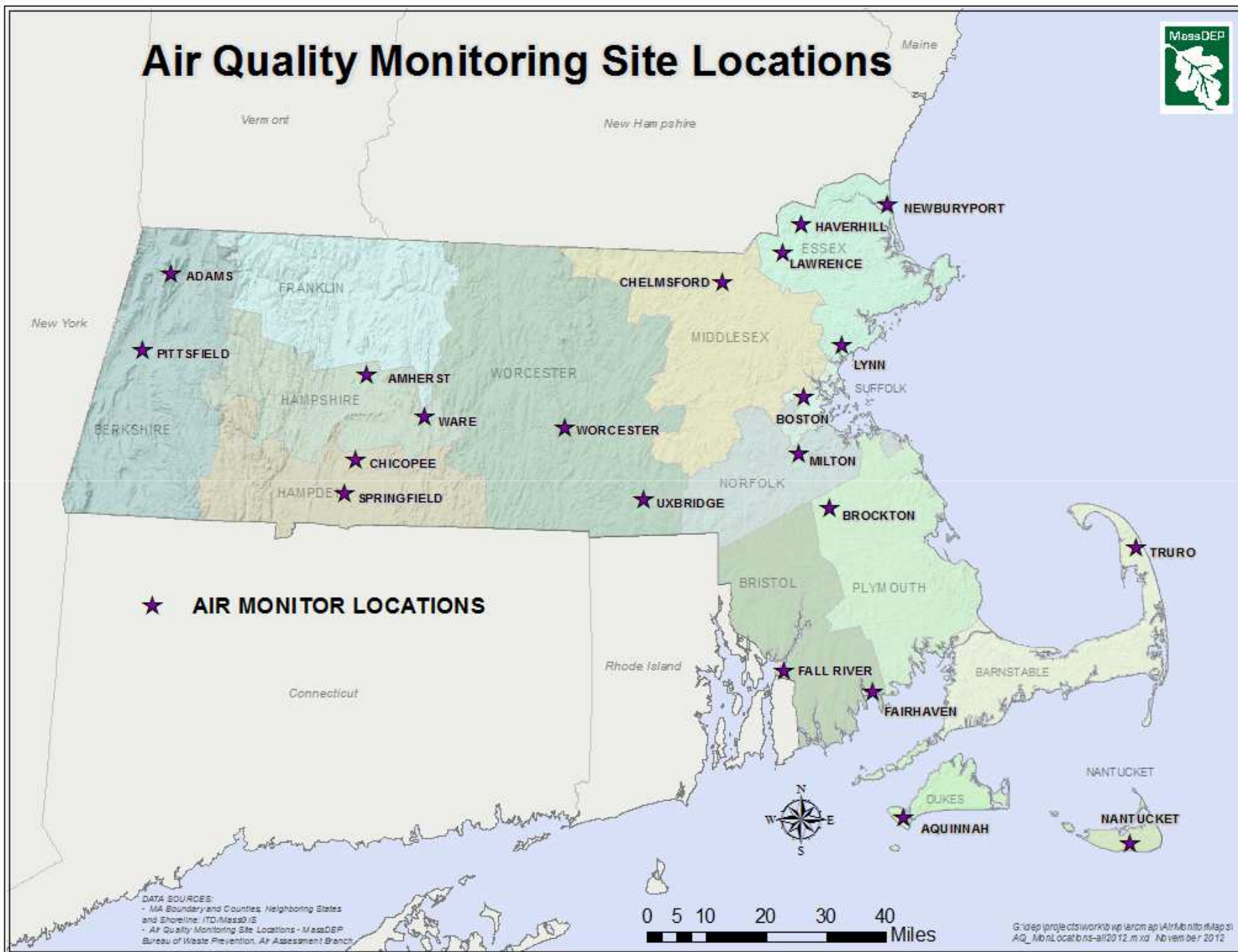
MassDEP Network

- 27 monitoring stations in 18 Communities
 - 86 air quality monitors (continuous and intermittent)
 - 68 meteorological instruments
- Network Types
 - Criteria Pollutants – O_3 , $PM_{2.5}$, PM_{10} , lead, NO_2 , SO_2 , CO
 - PAMS – ozone precursors (VOCs, NO_x)
 - Air Toxics/NATTS – air toxics
 - NCore – advanced multi-pollutant characterization
 - $PM_{2.5}$ Speciation – $PM_{2.5}$ characterization
 - IMPROVE – visibility (aerosol/ $PM_{2.5}$ characterization)
 - Near Road (NO_x , CO, PM)

Additional Monitoring

- Industrial - 1 site in Boston
- Tribal – 1 site on Martha's Vineyard
- EPA – 1 site at EPA Chelmsford Lab
- NADP – 2 precipitation sites (Ware & Truro)

Air Quality Monitoring Site Locations



Westover Air Force Base Station



North End Monitoring Station



Kenmore Square Station





Nantucket Airport Lead

Set up in January, 2012



Near Road Von Hillern Street

Boston Near Road NOx Location in South Boston/Dorchester

Recent/Planned Network Changes

- Completed Nantucket Airport 1-year lead monitoring study
- Completed relocation of Fairhaven ozone site
- Established near-road NO₂ monitor in Boston (with CO and eventually PM2.5)
- Adding continuous PM2.5 monitoring in Brockton
- Plan to move Amherst (ozone) to Greenfield and add PM2.5

Planned Network Changes

- Close Boston-Long Island ozone site
- Move Adams Mt. Greylock ozone site to ground level
- Discontinue NO_x/NO₂ monitoring in Haverhill but add year-round NO_x/NO₂ in Newburyport
- Close Springfield Main St PM₁₀/PM_{2.5} site but enhance Liberty St with PM₁₀ (has PM_{2.5} and lead)
- Close Boston-City Square PM₁₀/PM_{2.5} site (rely on other 3 nearby Boston PM₁₀/PM_{2.5} sites)
- Discontinue Cr+6 at Harrison Ave in Boston

Data Acquisition

- Upgrading data acquisition software system, including new hardware (e.g., polling computers)
- Will improve data retrieval, QA, and management

Monitoring Network Information

- Annual Air Quality Reports
- Annual Network Plans (40 CFR 58.10)
- 5-Year Network Assessment (40 CFR 58.10)
- MassAIR website